INTERNET METRIC SYSTEM

Abstract of the Invention

A network metric system 10 includes a nodal network 20, a database 40, an application server 46, a workstation 50, and at least one service daemon 60 that interfaces between the nodal network 20 and the database 40. The nodal network 20 is composed of a plurality of nodal members 30 between which one-way measurements are performed over asymmetrical paths. In the network metric system 10, the measurements are performed at the IP layer, in contrast to prior systems that perform measurements at the application layer. Further, the number of nodal members 30 used as measurement points in the nodal network 20 is highly scalable, in order to allow accurate measurements to be performed in network environment of virtually any size. The database 40 stores measurement data that is generated by the nodal members 30. The workstation 50 acts as a user interface to access the database 40 through the application server 46 for system configuration and reporting of the measurement data. The service daemon 60 interfaces with the nodal network 20 and the database 40. The service daemon 60 also instructs the nodal members to create new vectors, obtains vector configuration information from the database, and handles results data transmitted from the nodal members 30 to the database 40. The measurements include packet ordering data for received packets that is defined using a minimal longest ascending subsequence algorithm. The packets that are in the minimal longest ascending subsequence are considered in order, and the packets that are not in the minimal longest ascending subsequence are considered out of order.